PitchBook

European Venture Report

2017 Annual

Contents

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Key takeaways from the analysts

- The European venture industry reached new highs in 2017, at least in terms of overall deal value. Just under €17 billion was invested—the highest figure tracked by PitchBook—across 3,306 completed transactions. Those figures equate to changes of a year-over-year (YoY) increase of 13% and decrease of 25%, respectively.
- Contrary to earlier indications, 2017 proved to be a rebound year for VC-backed IPOs, which raised over €3 billion across 53 offerings. Assisted by large offerings from Delivery Hero and Rovio, 2017 was the strongest showing since 2014, which retains decade-highs values for both IPO value and count.
- The United Kingdom (UK) and Ireland have cemented their status as a VC stronghold with a record €7.1 billion invested across 1,221 deals. This was partially a product of its burgeoning fintech ecosystem, as nearly half of the total fintech deals across Europe were in the UK/Ireland region.

€16.9B
2017 European VC deal value
↗ 13% YoY

53
2017 European VC-backed IPOs

€1.2B
2017 European VC deal value in AI

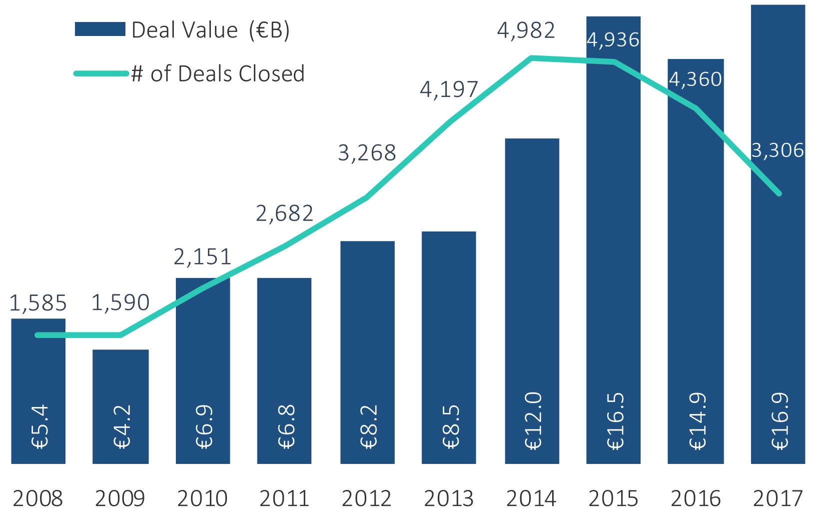
Overview

Strong VC investment despite sliding deal count

2017 was a record year for Europe's venture ecosystem, with €16.9 billion in capital invested—the highest number PitchBook has recorded. Deal count, however, trended downward for the third consecutive year. The final number of closed deals came in at just 3,306, a 24% decrease from 2016 and the lowest number of financings since 2012.

VC deal value reaches decade high in Europe

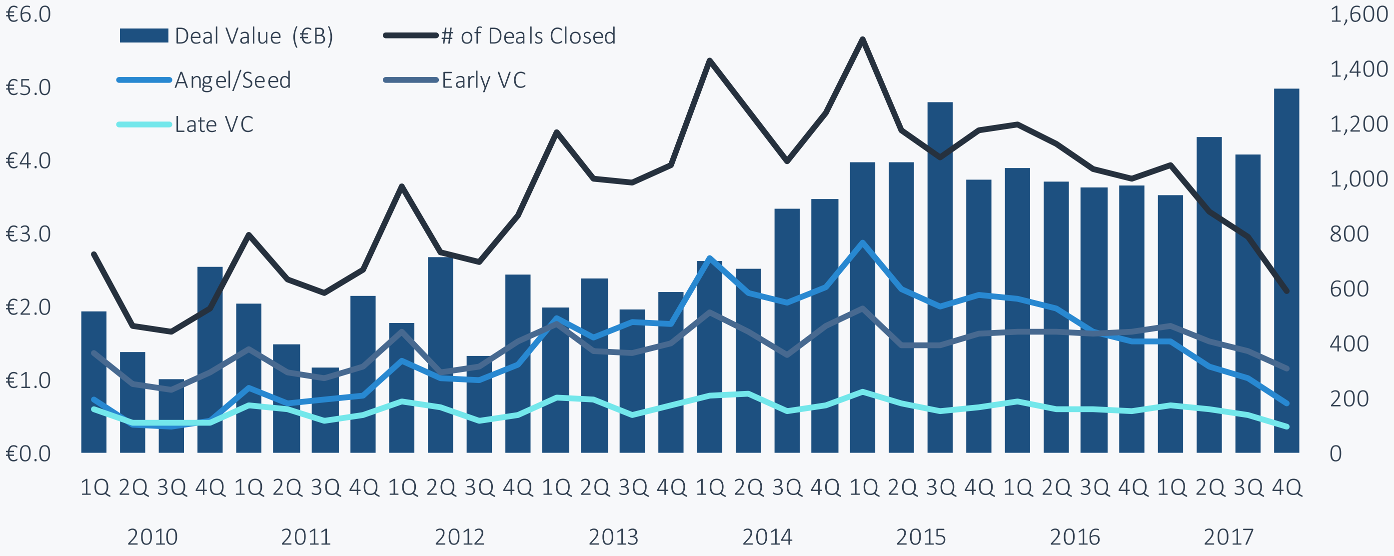
European VC activity



Source: PitchBook

4Q deal count falters to lowest level since 2011

European VC activity



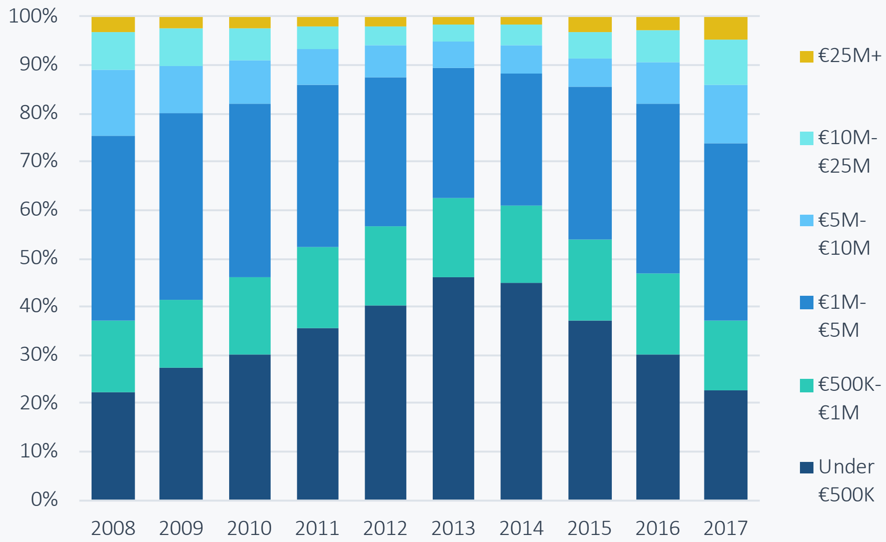
Source: PitchBook

Angel & seed deals see sharp decline

2017's low deal count was due in part to a significant decline in the number of angel & seed rounds, which saw a 39% decrease from 2016. One explanation for this trend is that investors are increasingly investing in more developed companies. Another contributing factor could be the increasing prevalence of angel deal syndication resulting from networks and governmental support, which may be pushing what would traditionally be angel & seed rounds into larger echelons where they are considered early stage deals instead. The European Business Angel Network (EBAN), for example, reports growing membership and assists angels in deal syndication and cross-border deal making. Additionally, the European Investment Fund (EIF) recently established the European Angel Fund (EAF), which provides matching equity investments and facilitates networking and co-investment

Deal sizes continue to trend larger

European VC activity (#) by size



Source: PitchBook

amongst angels. Whereas individual angels might complete more financings separately, syndicates enable angels to pool resources to participate in larger deals and share risk.

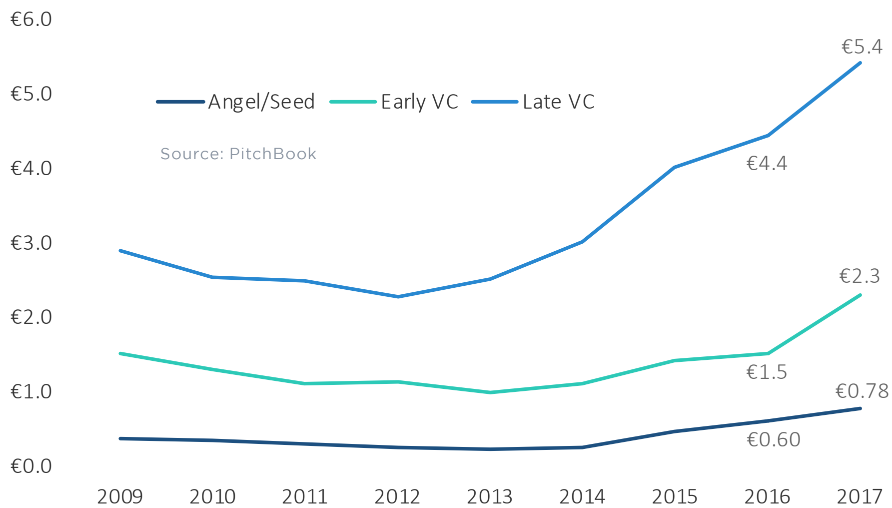
Deal sizes continue to grow

Though early and late stage deal counts have also declined, capital invested remained relatively stable in 2017, thanks in part to the proliferation of larger deals. Improbable's €458 million SoftBank-led Series B financing and Deliveroo's €417 million Series F round are both examples of the large deals which, though outliers, are part of the class of increasingly common large deals from recent years. More than half the capital invested in 2017 was in deals greater than €25 million, a segment that saw a 35% YoY deal count growth in 2017. Correspondingly, median early and late stage deal sizes reached heights of €2.3 million and €5.4 million, respectively.

Though domestic late stage capital has historically been difficult to access, the proportion of VC funds in the €100 million-€250 million bucket increased from 15% of total funds in 2014 to 35% in 2016. This was likely helpful to startups aiming for larger financings in 2017. Larger deals have also been facilitated by the participation of deep-pocketed foreign investors, including US VCs, who participated in over 17% of European deals in 2017. Seven out of 10 of the year's largest deals had participation from a US VC, and the median size of deals with US investor participation was €5.5 million. European startups may continue to look to US VCs for late stage financing because they have ample dry powder and can provide mentorship in scaling abroad.

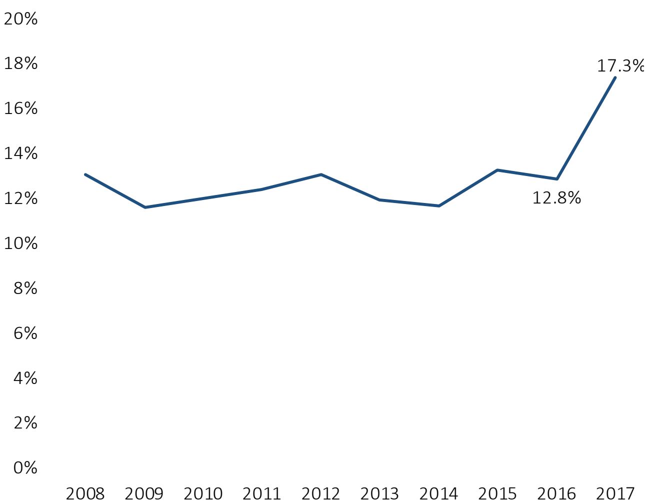
Median deal size reaches decade-high at all stages

Median European VC deal size (€M) by stage



US VCs increase participation in Europe

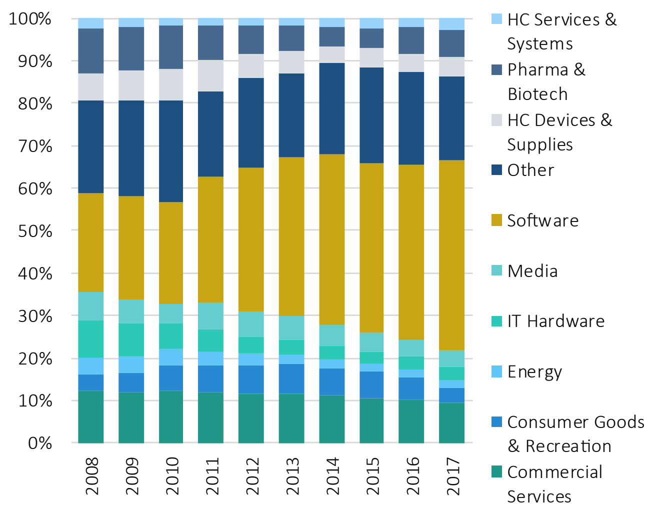
US VC participation rate in European VC deals (#)



Source: PitchBook

Software continues to dominate

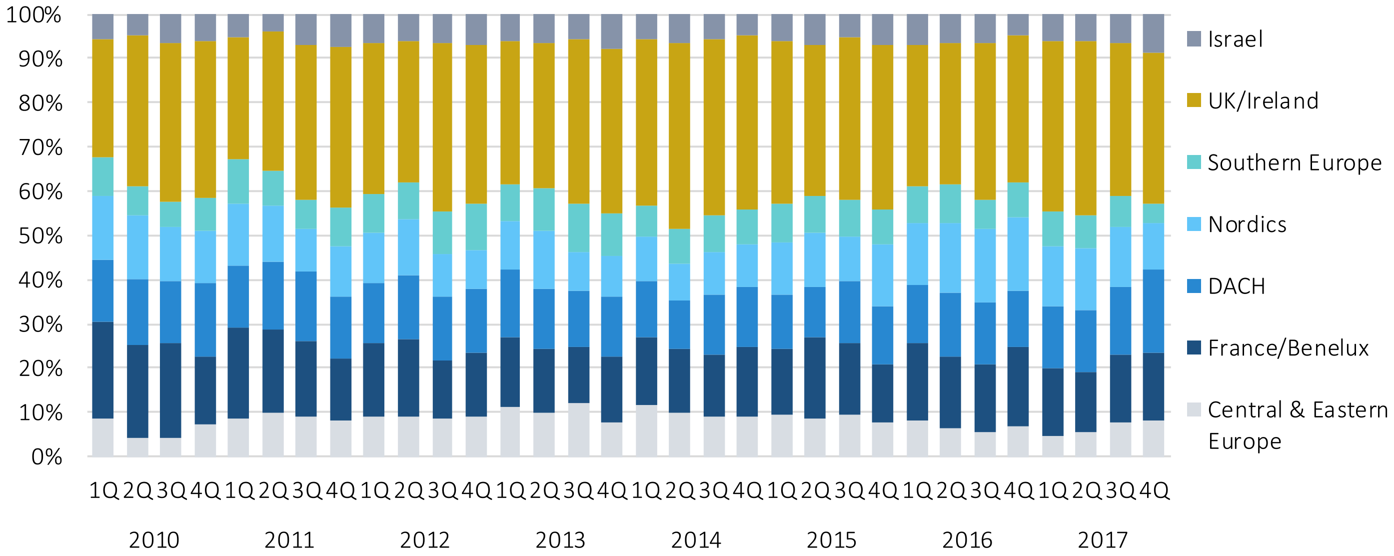
European VC activity (#) by sector



Source: PitchBook

The DACH region has increased its proportion of deal flow in recent years

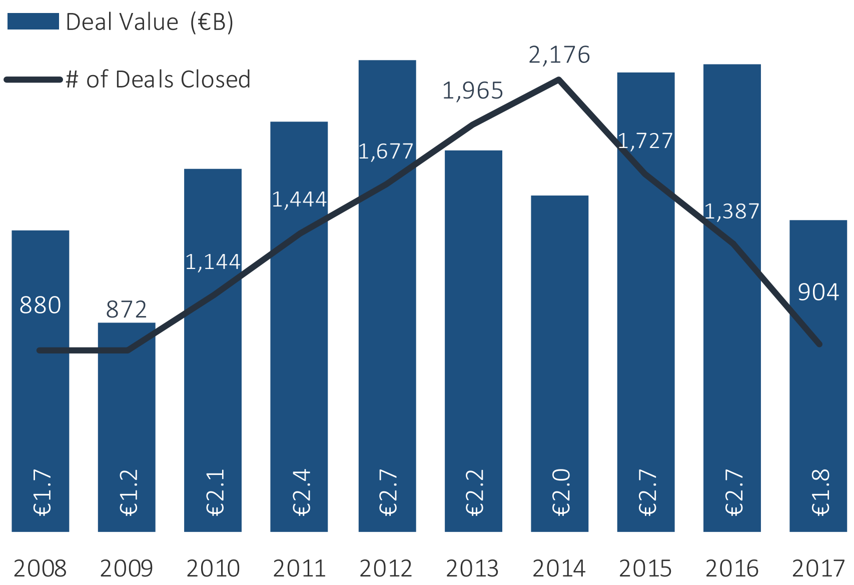
European VC activity (#) by region



Source: PitchBook

First-financing deals on a steep decline across Europe

European first-financing activity



Source: PitchBook

Over the past five years, total investment in software companies has grown from €1.2B to nearly €7B annually

40%

proportion of 2017 European VC deal value attributed to investment in software

Source: PitchBook

Spotlight

Artificial intelligence attracts record investment

The broad potential applications of artificial intelligence and machine learning (AI/ML) have attracted a stampede of VCs, who have demonstrated their enthusiasm through 30x growth in deal count over the past decade. 2017 has been a landmark year in that respect, as annual VC investment topped €1 billion for the first time. Naturally, VC interest in a space usually precedes the entrance of strategic acquirers. To that end, the exit market for these companies is still developing on the continent, as 2017 saw only 11 exits of AI/ML startups.

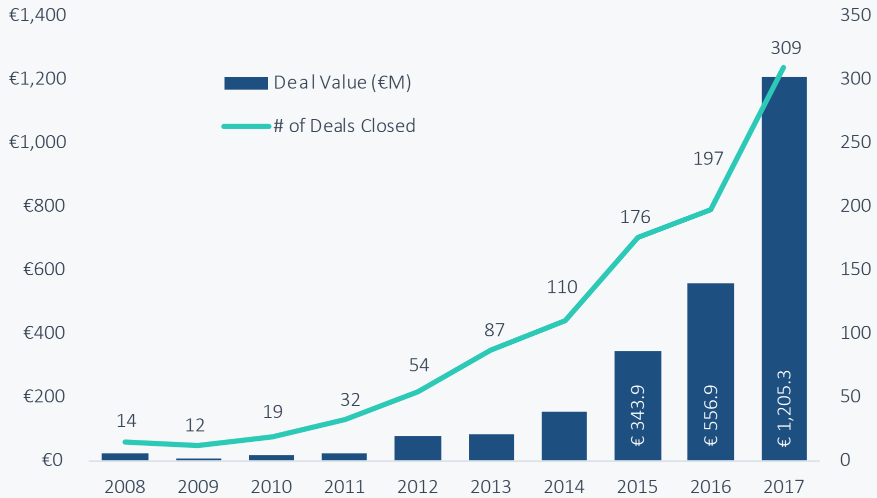
The recent buzz around AI/ML as a commercially viable technology began around 2006 with the advancements in Deep Learning—progress that was made possible by huge leaps in the three key areas of ML: new research approaches, computing power and data availability.

While AI has proliferated in many consumer-facing products, the field continues to be such a strong investment due to its application in the enterprise. Opportunities in this market span from automation in manufacturing and agriculture, to smart power grids and new drug discovery. A consistent shortcoming for corporations across nearly all industries is cybersecurity—another field AI/ML is working to transform. On that front, Cambridge-based Darktrace is implementing unsupervised learning techniques to identify unknown threats and anomalies in a diverse set of enterprise networks.

Due to the complexity of the problems and the computation power that they require, many AI/ML applications will take time to come to fruition. In response to these issues, advances are also being pursued in supporting hardware like quantum or high-performance computing as well as the associated chips (GPUs/CPUs/FPGAs/TPUs). This is a niche the startup Graphcore, headquartered in Bristol, is looking to exploit with their proprietary computer processor built specifically for machine learning applications. We expect deal and exit activity will continue to increase in the vertical through 2018, as automation through AI/ML becomes a widespread trend and the technology penetrates on an enterprise level across a more diverse set of industries.

Artificial intelligence investment reaches new deal value record

European VC activity in artificial intelligence & machine learning



Source: PitchBook

CVC

Corporate VC sees increased participation

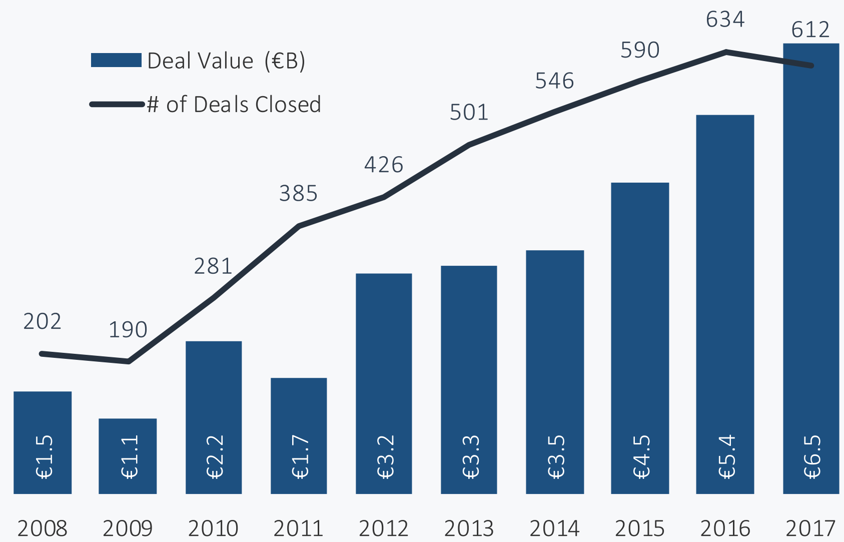
Deal value with Corporate VC (CVC) participation posted a sixth consecutive year of increases in 2017, recording €6.5 billion of closed transactions. However, the deal count trend flattened out on a YoY basis as CVC starts to follow the pervasive tendency toward larger deals. We attribute a large portion of this increase to the 66% YoY increase in the median size of early stage deals, which comprised nearly 60% of CVC deals in 2017.

The number of participants in the CVC market over the past five years shows a clear picture of growth. Starting in 2012, we recorded 68 unique European CVC investors that completed a deal, with the most active investor, Almi Invest, participating in 47 deals. Just five years later, Almi Invest remains the most active investor, but the number of active investors has reached 120 in total, an increase of over 75%. As large corporations continue to search for flexibility and efficiency when allocating capital, CVC as a strategy should gain traction.

The further adoption of CVC speaks to the effectiveness of the strategy for sourcing innovative ideas that can reduce expenses in the prolonged low-growth environment across most of the developed world. As the CVC market has developed, it has become an increasingly popular strategy to invest and as an augmentation to traditional R&D. In comparison to full in-house R&D, the CVC approach offers a few advantages: potential financial returns, intellectual property sharing, lower upfront cost of both capital and time, and acquisition optionality.

Corporate VC remains popular investment type

European VC activity with CVC participation



Source: PitchBook

€10M

median late-stage deal size with CVC participation

Source: PitchBook

The median late-stage CVC deal size is nearly double the size of traditional late-stage deals across Europe

Regional Spotlight

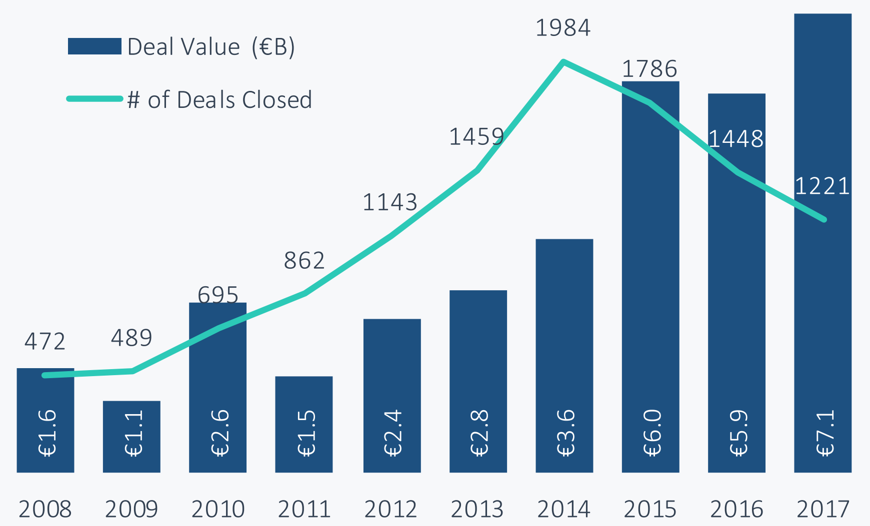
UK and Ireland saw record deal value in 2017

The UK and Ireland has long been regarded as the stronghold of Europe's venture ecosystem. 2017 data further cemented this sentiment, showing a record year for venture financings, with approximately €7.1 billion invested across 1,221 deals—a high-water mark for capital invested despite a decline in deal count. This growth may be attributed to ample funding for startups encouraged by various government initiatives, which have subsequently contributed to an entrepreneurial ecosystem of mature companies ready for larger, late stage investment. Additionally, London's long-time status as a financial hub and its friendly regulatory environment have encouraged the region's blossoming fintech scene.

Historically, deals in the UK/Ireland region have taken place more in the earlier stage, but the UK's maturing venture ecosystem has propelled startups to the point where they are now raising larger rounds. The region saw a record volume and value of large deals, with over €4 billion invested in 53 rounds greater than €25 million. The UK government has in place several venture investment schemes that incentivize seed and early stage investment through tax breaks to high net worth investors. Additionally, the British Business Bank's Enterprise Capital Funds program has deployed capital across 26 UK VC funds, fostering emerging fund managers investing in growing businesses. Accommodative

Deal count continues to slide, despite uptick in deal value

UK/Ireland VC activity



Source: PitchBook

US firms participated in the highest percentage of UK/ Ireland deals since 2007

18.9%

percentage of UK/Ireland VC deals with US investor participation

Source: PitchBook

Just 312 first financings were completed in 2017, the lowest in eight years

63%

percentage decline in the number of first financings in the UK/Ireland since 2014

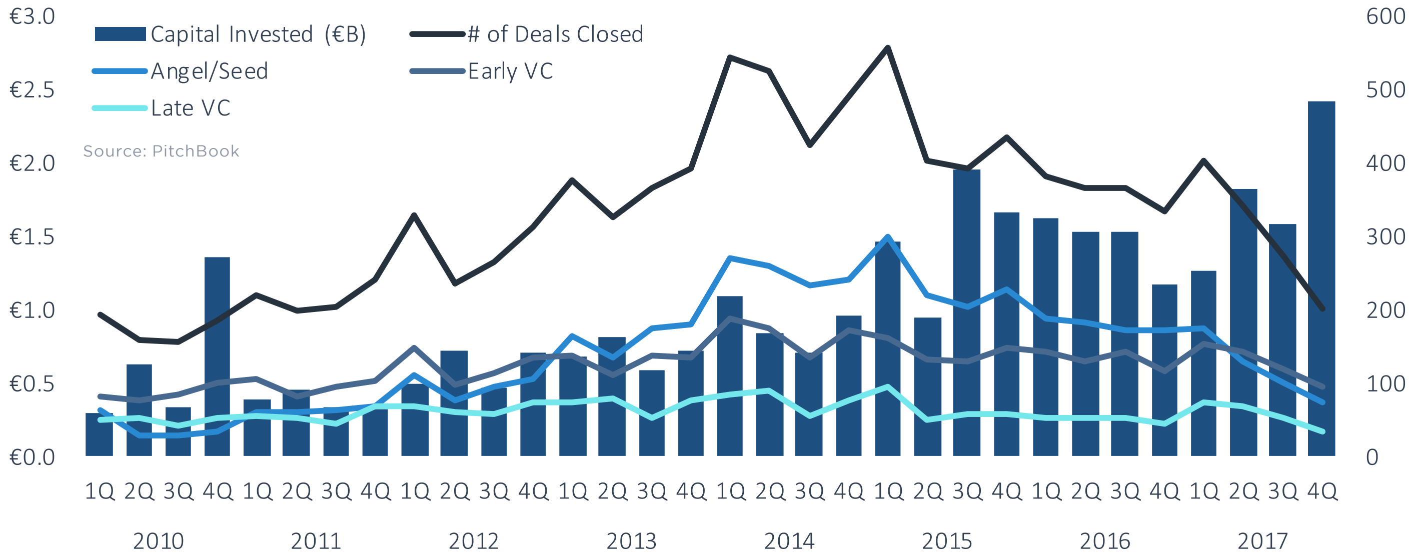
Source: PitchBook

governmental policies seem to have contributed to early stage investment which, in turn, has helped companies reach milestones and score larger deals.

The region's strong activity in 2017 was also partially a product of its burgeoning fintech ecosystem. Of 2017's 297 fintech deals in Europe, 137 were closed by companies operating out of the UK and Ireland, which garnered €1.65 billion in VC investment. The region's fintech ecosystem has flourished in recent years thanks in part to the UK's established financial sector and supportive regulatory environment. In 2014, the UK government's Financial Conduct Authority (FCA) initiated Project Innovate to help fintech startups get their products approved and provide a "sandbox" to test their products in a live environment. The FCA reports that 75% of Project Innovate's first cohort had their testing plans approved, and in 2017 the FCA began work with a second cohort of 24 fintech companies. Though traction in fintech is strong, the UK will need to keep an open labor market to attract and maintain the international engineering talent that keeps its tech startups afloat.

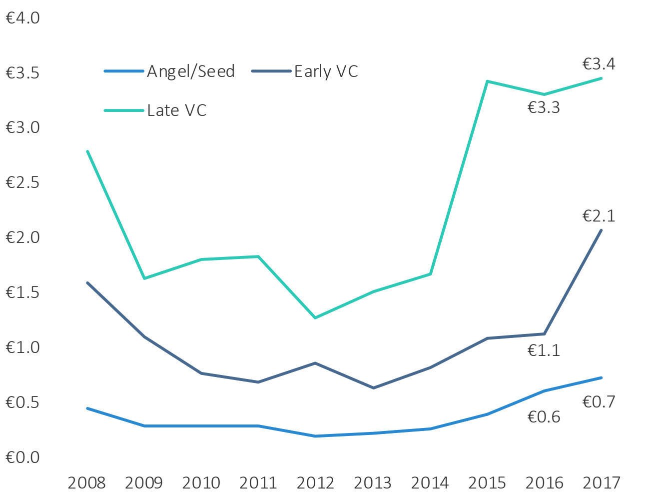
Deal value surged in 4Q due to several large deals

UK/Ireland VC activity



UK/Ireland deal sizes increases

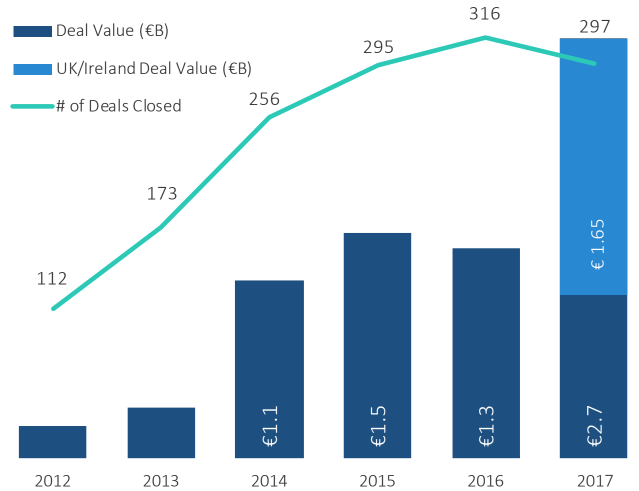
Median UK/Ireland VC deal size (€M)



Source: PitchBook

Region leads in fintech investment

European fintech activity



Source: PitchBook

Exits

VC-backed exits remain relatively strong

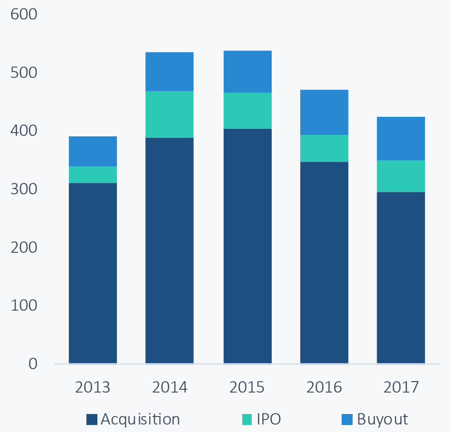
2017 saw exit counts and value in line with those of the past five years, as €11.6 billion was exited across 426 deals. While this represents a two-year slide in exit activity from the peak in 2015, 2017 marks the fifth consecutive year of over €11.5 billion exited. Worth noting is the strength of the exit market despite the absence of any billion-euro exits closing in 2017. These deals can significantly underpin exit value but also skew the underlying trends of the total market. Robust exit value despite lower volume and mega-deals seems to indicate a stabilization of the market around a new standard of exit value.

Contrary to earlier indications, 2017 proved to be a rebound year for VC-backed IPOs, raising over €3 billion across 53 offerings. Assisted by larger offerings from Delivery Hero and Rovio, this year was the strongest showing since 2014, which retains decade-highs values for both IPO value and count.

Looking forward in 2018, one of the most anticipated exits is Spotify's pursuit of a direct listing. This unconventional transaction will not raise any new capital and will be completed without formal underwriting support from investment banks. We believe this approach has potential disruptive power on the traditional IPO process, since Spotify is going through this process with only a handful of advisors and paying them a fraction of the normal IPO fee. Because of Spotify's size and unique a-la-carte attitude toward investment banking services, its IPO will be closely watched by many of the other large late-stage companies that have postponed IPOs over the last couple years.

IPOs and buyouts show relative strength

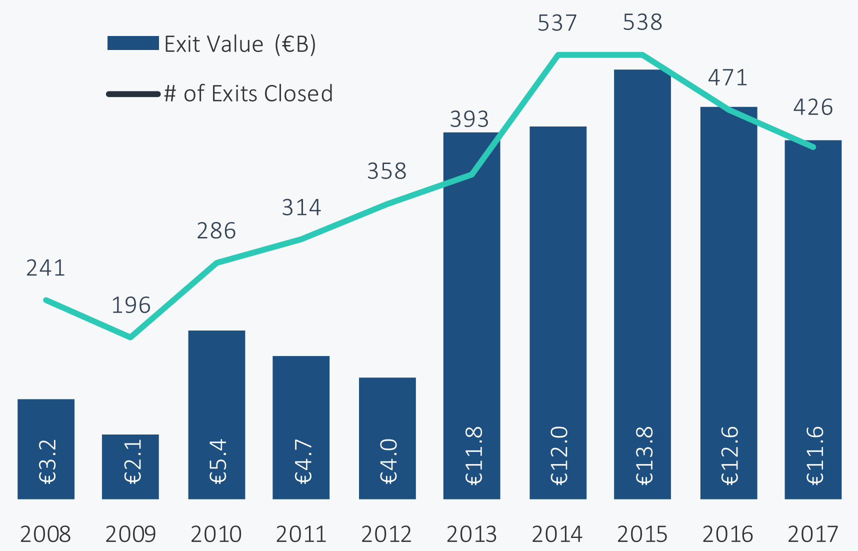
European VC-backed exits (#) by type



Source: PitchBook

Exit value remains historically high

European VC-backed exits



Source: PitchBook

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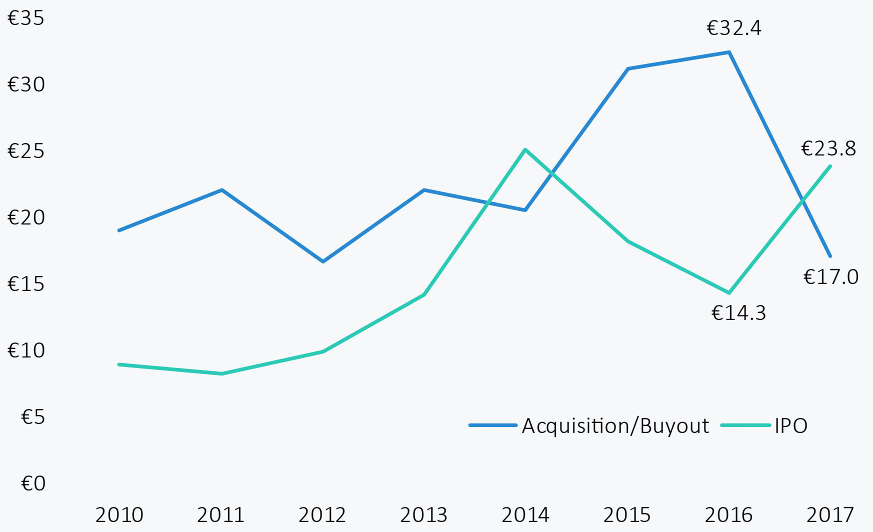
EXITS

Median acquisition/buyout exit size declined to decade low

Median VC-backed exit size (€M) by type



Source: PitchBook

In 2017, the median valuation for VC-backed exits fell to its lowest point since 2012

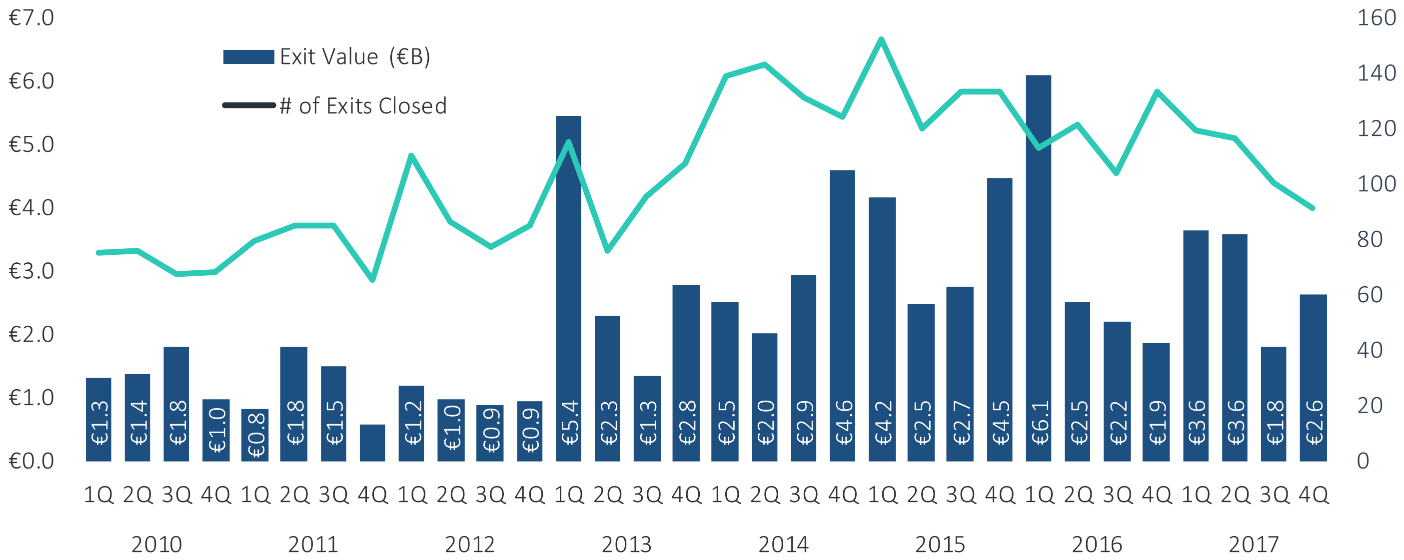
$33.0M

median post-money valuation for VC-backed exits in 2017

Source: PitchBook

Exit count fell to a four-year low in 4Q

European VC-backed exit activity



Source: PitchBook

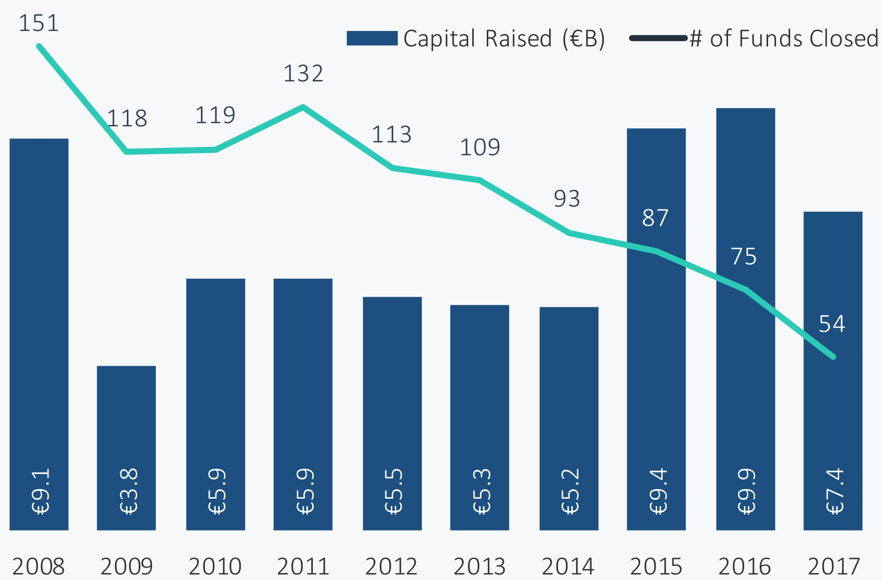
Fundraising

Healthy fundraising activity despite dwindling fund count

Fundraising saw a 25% decrease in volume in 2017, with €7.4 billion raised across only 54 vehicles. Although 2017 is the third consecutive year to see more than €7 billion in capital raised by European VCs, fund count continued a six-year slide leading to the lowest level in 10 years. Reflecting recent venture market dynamics, the presence of seed and early stage funds has diminished significantly, with only 10 micro-funds (less than €50 million) raised in 2017. The data suggest that early stage investors may be targeting larger funds sizes, as 2017 saw an uptick of funds raised in the €50 million– €100 million range.

Fundraising totals decline despite uptick in fund sizes

European VC fundraising activity



Source: PitchBook

Fund count dwindles as VCs raise larger funds

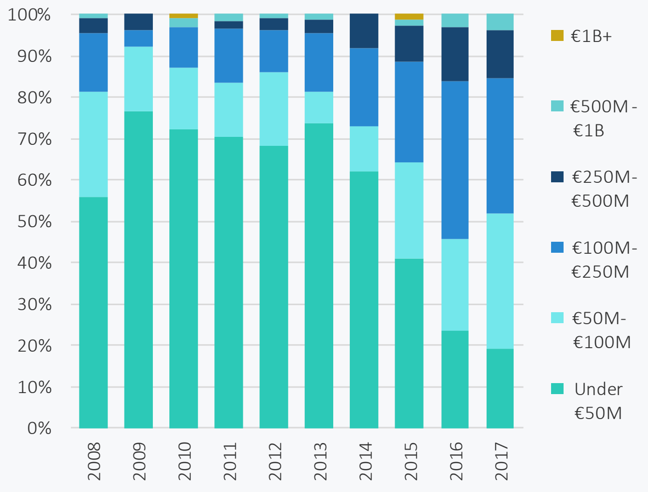
Three years ago, micro-funds made up 49% of funds raised in Europe. In 2017, however, the proportion of micro-funds has shrunk to 19% of the total, while 62% of funds raised were in the €50 million– €250 million range. Perhaps in response to the more than doubling of early-stage deal sizes over the past three years, it appears VCs are raising larger funds to meet the growing prices of venture deals and maintain sufficient follow-on reserves. In 2017, more than half of funds in €50 million–€100 million range were at least twice the size of their previous fund.

2017's low fund count may also be a result of LPs committing larger sums to fewer managers. Established fund managers may have an easier time raising larger funds as LPs look to commit more capital to fewer, historically high-performing managers. LPs frequently cite two reasons for writing larger checks and consolidating to proven managers. First, cementing relationships with GPs that can deliver consistent returns is valuable, as there are considerable opportunity costs to allocating to an unsuccessful manager. Fewer manager relationships also makes portfolio management easier for LPs, some of which have limited staff to manage alternative investments.

Fundraising

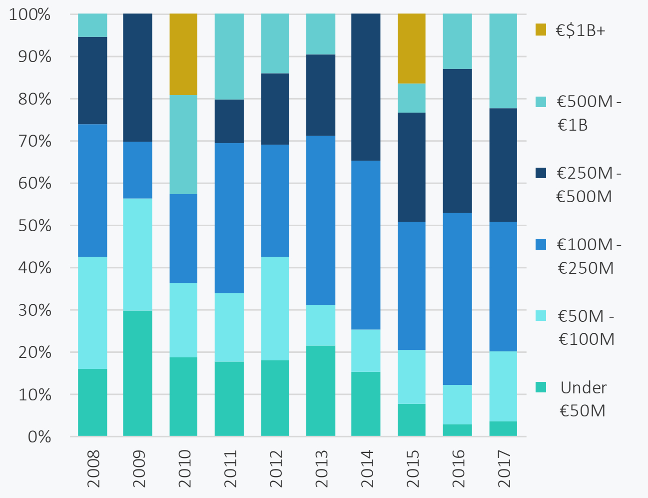
Micro-funds less prominent as European VCs raise larger funds

European VC fundraising (#) by size



Source: PitchBook

European VC fundraising (€) by size



Source: PitchBook

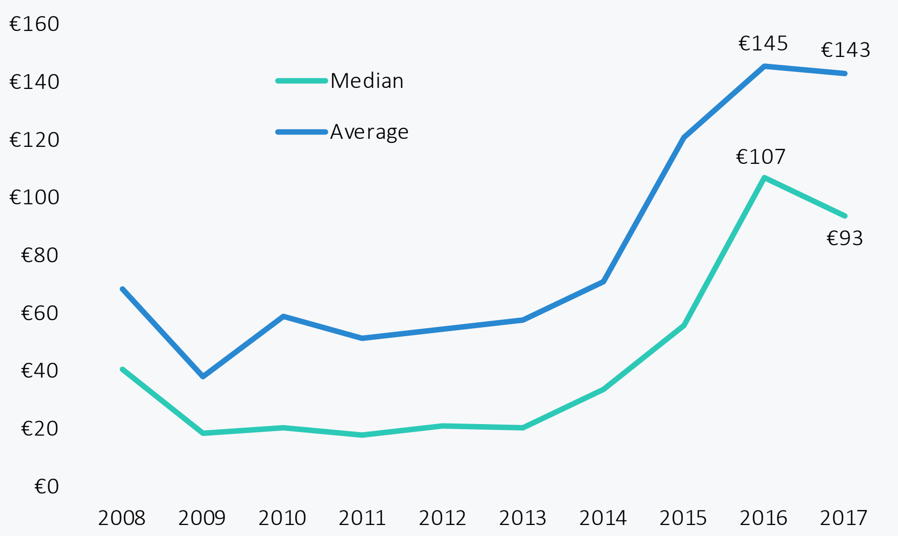
Nearly as much has been raised by European VC funds since 2015 as had been raised during the previous five years

€26.7B

amount raised for European VC funds over the past three years

Average European VC fund size has plateaued

Median and average European VC fund size (€M)



Source: PitchBook

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4Q 2017 League Tables

Top 10 largest European VC deals in 4Q 2017

Company	Deal size (€M)	Series/stage	Date	HQ	Country	Industry
Deliveroo	417.5	Series F	17/11/2017	London	UK	Software
Truphone	286.3	Late Stage	3/10/2017	London	UK	IT Hardware
TransferWise	238.7	Series E	1/11/2017	London	UK	Other
OakNorth	172.9	Late Stage	12/10/2017	London	UK	Other
ADC Therapeutics	170.1	Late Stage	23/10/2017	Epalinges	Switzerland	Pharma & Biotech
The Ink Factory	153.4	Late Stage	16/11/2017	London	UK	Media
Insightec	126.7	Series E	14/12/2017	Tirat Carmel	Israel	HC Devices & Supplies
Orchard Therapeutics	96.3	Series B	20/12/2017	London	UK	Pharma & Biotech
Secret Escapes	93.1	Series D	5/10/2017	London	UK	Consumer Goods & Recreation
BIMA	90.4	Late Stage	19/12/2017	Stockholm	Sweden	Other

Source: PitchBook

Top 10 European VC-backed exits in 4Q 2017

Company	Exit size (€M)	Exit type	Date	HQ	Country	Industry
Rigontec	464.0	Acquisition	26/10/2017	Munich	Germany	Pharma & Biotech
Argus Cyber Security	340.2	Acquisition	30/10/2017	Tel Aviv	Israel	Software
Shazam	337.9	Acquisition	11/12/2017	London	United Kingdom	Media
Goodgame	270.0	Acquisition	6/12/2017	Hamburg	Germany	IT Hardware
Invendo Medical	225.0	Acquisition	25/10/2017	Weinheim	Germany	HC Devices & Supplies
Skagen Funds	203.2	Acquisition	11/12/2017	Stavanger	Norway	Other
JustGiving	108.0	Acquisition	2/10/2017	London	United Kingdom	Other
InflaRx	85.2	IPO	8/11/2017	Jena	Germany	Pharma & Biotech
Orphazyme	80.6	IPO	16/11/2017	Copenhagen	Denmark	Pharma & Biotech
BioArctic	72.9	IPO	12/10/2017	Stockholm	Sweden	Pharma & Biotech

Source: PitchBook

Top 10 largest European VC funds closed in 4Q 2017

Fund name	Investor	Fund size (€M)	Close date	HQ	Country
Balderton Capital Fund VI	Balderton Capital	319.6	26/11/2017	London	London
LSP Health Economics Fund 2	Life Sciences Partners	280.0	12/12/2017	Amsterdam	Amsterdam
CapHorn Invest II	CapHorn Invest	130.0	23/10/2017	Paris	Paris
Sunstone Technology Ventures Fund IV	Sunstone Capital	112.0	2/11/2017	Copenhagen	Copenhagen
Italia Venture I	Invitalia Ventures	87.0	24/10/2017	Rome	Rome
BioGeneration Ventures III	BioGeneration Ventures	82.0	31/10/2017	Naarden	Naarden
Episode 1 Enterprise Capital Fund II	Episode 1 Ventures	68.0	1/12/2017	London	London
Brighteye Ventures Fund I	Brighteye Ventures	50.0	1/11/2017	Paris	Paris
GMG Ventures	GMG Ventures	47.2	18/10/2017	London	London
Fly Ventures Fund I	Fly Ventures	34.6	21/12/2017	Berlin	Berlin

Source: PitchBook